PATENT Customer No. 22,852 Attorney Docket No. 03806.0394-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)		
Francis BLANCHE et al.	Prior Group Art Unit: 1652		
Application No.: To be assigned) Prior Examiner: R. Hutson		
Filed: Concurrently herewith)		
For: NOVEL TOPOISOMERASE IV, CORRESPONDING NUCLEOTIDE SEQUENCES AND USES THEREOF))))		
Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450			
Sir:			

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed concurrently with this application.

Copies of the listed documents were previously submitted in prior Application No. 08/776,265, filed January 24, 1997, or were cited by the Examiner in prior Application No. 09/398,184, filed September 17, 1999, both of which are relied upon by Applicants for priority under 35 U.S.C. § 120. Accordingly, Applicants have not provided additional copies of these documents in this submission. 37 C.F.R. § 1.98(d). Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

1300 I Street, NW Washington, DC 20005 202.408.4000 Fax 202.408.4400 www.finnegan.com

PATENT

Customer Number 22,852

Serial Number: To be assigned

umber. To be assigned

Attorney Docket No. 03806.0394-02

This submission does not represent that a search has been made or that no

better art exists and does not constitute an admission that each or all of the listed

documents are material or constitute "prior art." If the Examiner applies any of the

documents as prior art against any claim in the application and Applicants determine

that the cited documents do not constitute "prior art" under United States law,

Applicants reserve the right to present to the office the relevant facts and law regarding

the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the

patentability of the disclosed invention over the listed documents, should one or more of

the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please

By:

charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,

GARRETT & DUNNER, L.L.P.

Dated: August 25, 2003

M. Todd Rands

Reg. No. 46,249

FINNEGAN HENDERSON FARABOW GARRETT & DUNNERLLP

1300 I Street, NW Washington, DC 20005 202.408.4000 Fax 202.408.4400 www.finnegan.com

INFORMATION DISCLOSURE CITATION

Atty. Docket No.	03806.0394-02000	Appln. No. To be assigned
Applicants	Francis BLANCHE et al.	
Filing Date	Concurrently Herewith	Prior Group: 1652

		U.S. PATENT	DOCUMENTS			
Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
	6,001,631	12/14/99	Blanche et al.	435	233	
		*				

	FOREIGN PATE	NT DOCUMENT	S		
Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
Bagdasarian, M. et al., "Specific-purpose plasmid cloning vectors. II. Broad host range, high copy number, RSF1010- derived vectors, and a host-vector system for gene cloning in <i>Pseudomonas</i> ," Gene 16:237-247 (1981).
Ferrero et al., "Cloning and primary structure of Staphylococcus aureus DNA oisomerase IV a primary target of fluoroquinolones," Molecular Microbiology 13(4):641-653 (1994).
Ferrero et al., "Analysis of <i>gyrA</i> and <i>gr1A</i> Mutations in Stepwise-Selected Ciprofloxacin-Resistant Mutants of <i>Staphylococcus aureus</i> ," Antimicrobial Agents and Chemotherapy 39(7):1554-1558 (1995).
Gellert, M. et al. "DNA gyrase: An enzyme that introduces superhelical turns into DNA," Proc. Natl. Acad. Sci. USA 73:3872-3876 (1976).
Higgins, D.G. and Sharp, P.M., "CLUSTAL: a package for performing multiple sequence alignment on a microcomputer," Gene 73:237-244 (1988).
Holmes, M.L. and Dyall-Smith, M., "Mutations in DNAGyrase Result in Novobiocin Resistance in Halophilic Archaebacteria," J. Bacteriol. 173(2):642-648 (1991)
Hopewell, R. et al., "DNA Cloning and Organization of the <i>Staphylococcus aureus gyrA</i> and <i>gyrB</i> Genes Close Homology among Gyrase Proteins and Implications for 4-Quinolone Action and Resistance," J. Bacteriol., 172(6):3481-3484 (1990).
Hooper, D.C. and Wolfson, J.S., "Mechanisms of Quinolone Action and Bacterial Killing," In Quinolone Antimicrobial Agents, Hooper, D.C., and Wolfson, J.S. (eds), American Society of Microbiology, Washington, D.C., pp. 53-75 (1993).
Horowitz, D.S. and Wang, J.C., "Mapping the Active Site Tyrosine of <i>Escherichia coli</i> DNA Gyrase," J. Biol. Chem. 262(11):5339-5344 (1987).
Kato, J. et al., "Purification and Characterization of DNA Topoisomerase IV in <i>Escherichia coli</i> ," J. Biol. Chem. 267(36):25676-25684 (1992).

INFORMATION DISCLOSURE CITATION

Atty. Docket No.	03806.0394-02000	Appln. No.	To be assigned
Applicants	Francis BLANCHE et al.		
Filing Date	Concurrently Herewith	Prior Group:	1652

 OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
Kato, J. et al., "New Topoisomerase Essential for Chromosome Segregation in <i>E. coli</i> ," Cell 63(2):393-404 (1990).
Luttinger, A.L. et al.,"A Cluster of Genes That Affects Nucleoid Segregation in Salmonella typhimurium," New Biol 3:(7)687-697 (1991).
Margerrison, E.E.C. et al., "Nucleotide Sequence of the <i>Staphylococcus aureus gyrB-gyrA</i> Locus Encoding the DNA Gyrase A and B Proteins," J. Bacteriol., Am. Soc. Microbiol., 174(5):1596-1603 (1992).
Ng E. Y. et al., "Novel Mutations in Topoisomerase IV (Topo4) in Quinolone-Resistant (QR) flqA Mutants and Their Interaction with QR <i>gyrA</i> Mutations in <i>Staphylococcus aureus</i> ," 95th General Meeting of the American Society for Microbiology, Washington, D.C., May 21-25, 1995. Abstracts General Meeting of the American Society for Microbiology 95(0).
Normark, S. et al., "Overlapping Genes," Ann. Rev. Genet. 17:499-525 (1983).
Novick, R.P., "The <i>Staphylococcus</i> as a Molecular Genetic System," in Molecular Biology of the <i>Staphyloccoci</i> ," Novick, R.P. (ed). VCH Publishers, Inc., New York, pp. 1-37 (1990).
H. Peng and K. J. Marians, "Escherichia coli Topoisomerase IV," J. Biol. Chem. 268 (32):24481-24490 (1993).
H. Peng and K. J. Marians, "Decatenation activity of topoisomerase IV during <i>oriC</i> and pBR322 DNA replication <i>in vitro</i> ," Proc. Natl. Acad. Sci. 90:8571-8575 (1993).
Sreedharan S. et al., "DNA Gyrase <i>gyrA</i> Mutations in Ciprofloxacin-Resistant Strains of <i>Staphylococcus aureus</i> Close Similarity with Quinolone Resistance Mutations in <i>Escherichia coli</i> ," J. Bacteriol., 172(12):7260-7262 (1990)
Staudenbauer, W.L. and Orr, E., "DNA gyrase: affinity chromatography on novobiocin-Sepharose and catalytic properties," Nucleic Acid Research, 9(15):3589-3603 (1981).
Studier, W.F. et al., "Use of T7 RNA Polymerase to Direct Expression of Cloned Genes," Methods In Enzymol. 185:60-89 (1990).
Wigley, D.B. et al., "Crystal structure of an N-terminal fragment of the DNA gyrase B protein," Nature 351:624-629 (1991).
Sigma Chemical Company, Product Catalog, page 51 (1993).
 Sigma Chemical Company, "L-Glycine," Product Catalog, No. G7403, page 484 (1993).

Examiner Date Considered		Date Considered		
*Examiner:	through citation if r	Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		
Form PTO 1449		Patent and Trademark Office - U.S. Department of Commerce		